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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,248	11/04/2003	Sheng-Fa Fan	7257/71417	6114

7590 05/15/2006

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New York, NY 10036

EXAMINER

RUNNING, RACHEL A

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. -10/701,248	Applicant(s) FAN, SHENG-FA	
	Examiner Rachel A. Running	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/4/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 15 is/are rejected.
- 7) ☒ Claim(s) 2-14 and 16-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Uriss (U.S. Patent No. 4,574,823). Uriss discloses a flosser comprising a housing (12) with a body and an extending tube (14) protruding from the body see Figure 2. A winding wheel rotatably attached inside the body, wherein the winding wheel comprises a toothed plate (40) and a driving plate (38), and a middle rod (48) connecting between the toothed plate and the driving plate see Figures 2-4 (column 2, lines 50-55). A string of dental floss (20) is wound on the middle rod of the winding wheel and tied to a distal end of the extending tube see Figure 3 (column 2, lines 43-48). A locking device (24) mounted on the housing that is detachably engagable with the winding wheel see Figure 5 (column 2, lines 58-62).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uriss in view of Bergman (U.S. Patent No. 6,874,509). Uriss discloses the claimed invention see rejection to claim 1 above; however, Uriss does not disclose a sharp edge formed at the front edge of the distal end of the extending tube or an obtuse edge formed at the rear edge of the distal end of the extending tube. Bergman teaches a sharp edge (34) formed at the front edge of the extending tube and an obtuse edge formed at the rear edge of the extending tube see Figure 12. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the front edge of the distal end of the extending tube of Uriss with a sharp edge and the rear edge of the distal end of the extending tube of Uriss with an obtuse edge as taught by Bergman in order to further aid in reducing the friction on the floss.

Allowable Subject Matter

5. Claims 2-14 and 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The claims in the instant application have not been rejected using prior art because no references, or reasonable combination thereof, could be found which disclose or suggest a dental flosser that has a first limiting flange formed on an inner periphery of the housing between the body and the extending tube, and a second

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limiting flange formed on the inner periphery near the distal end of the extending tube.

A locking device that comprises a trigger block movably attached to the housing, a locking sheet mounted under the trigger block, and a shaft attached in front of the trigger block and being limited by the first limiting flange. A floss-tying block connected to the shaft to operationally block the extending tube, and being limited by the second limiting flange as set forth in claims 1 and 2. The closest prior art appears to be the Lo (U.S. Patent No. 6,089,241) reference. Lo discloses a second limiting flange (15) formed on the inner periphery near the distal end of the extending tube. A locking device comprising a trigger block (30) movably attached on the housing. A floss-tying block (115) connected to a shaft (113) to operationally block the extending tube and being limited by the second limiting flange see Figure 4. However, Lo does not disclose a winding wheel rotatably attached inside the body of the housing, wherein the winding wheel comprises a toothed plate, a driving plate, and a middle rod connecting the toothed plate and the driving plate, also the locking device of Lo does not engage with the winding wheel as set forth in claim 1. Lo also does not disclose the first limiting flange formed on the inner periphery of the housing that limits the shaft (113) as set forth in claim 2. Furthermore there is no motivation in the art to show the trigger block operating both the winding wheel and the floss-tying block.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel A. Running whose telephone number is (571)

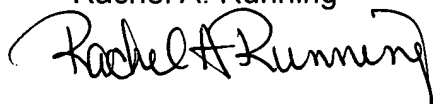
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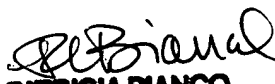
272-1917. The examiner can normally be reached on Monday-Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rachel A. Running




PATRICIA BIANCO
PRIMARY EXAMINER
5/11/06